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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/710,337	07/01/2004	Joseph Araujo	CT-P0001	4336

36067 7590 02/01/2007  
DALINA LAW GROUP, P.C.  
7910 IVANHOE AVE. #325  
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EXAMINER
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PERREIRA, MELISSA JEAN

ART UNIT	PAPER NUMBER
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1618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/01/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/710,337

Applicant(s)

ARAUJO ET AL.

Examiner

Melissa Perreira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/11/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 1-26 are pending in the application.
2. Applicant's election without traverse of group 1, claims 1-12, in the reply filed on 12/23/06 is acknowledged. Claims 13-26 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected groups II and III, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/23/06.

### ***Information Disclosure Statement***

3. The information disclosure statement filed 7/11/04 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Specification***

4. The disclosure is objected to because of the following informalities: The specification includes incorrect spacing and capitalization found on pages 26-42 (see [0060],[0062],[0064-0066],[0069-0073],[0075],[0077],[0079-0081],[0085-0090],[0092-0094]). Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 10 recites the limitation "said preferred food, food stuff or veterinary biologic". There is insufficient antecedent basis for this limitation in the claim. The recitation "preferred food, food stuff or veterinary biologic" is not found in the instant claim 1 to which claim 10 depends.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Chandler et al. (US 4,777,058).

9. Chandler et al. (US 4,777,058) teaches of the method of determining the palatability of animal food compositions via offering an equal amount of two food compositions that are weighed into separate feed pans to beagles in a discrimination type learning procedure (column 8, lines 50+). The distinct stimuli can include smell or visual differences in the food compositions and the reward is the food composition itself. After rewards, both pans are removed from the dogs and the remaining food weighed and the amount of food consumed was calculated and statistically analyzed (column 8,

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lines 50+). Ultimately the strength of preference calculated where the preferred food is most frequently chosen over a non-preferred food (column 9, lines 1-15).

10. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 211-215).

11. Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 211-215)

teaches of the method of determining the palatability of animal food compositions via an operant conditioning methodology (operant schedules) in which the pressing of a preferred lever releases the preferred food reward (p211, paragraph 3; p213, paragraphs 4-6). This operant conditioning methodology is a discrimination type learning procedure that is a way to quantify in an objective fashion the strength of animals' motivation to eat by placing a barrier between animal and food and to require the animal to perform some response (such as pressing on a lever) in order to obtain portions of food (p211, paragraphs 2 and 3). The stimuli include qualitative dimensions, such as flavor of the food and the animals are tested repeatedly over a period of months or even years.

12. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 231-237).

13. Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 231-237)

teaches of the method of determining the palatability of food depending on a qualitative difference, such as flavors in concurrent operant schedules. The preference for a flavor

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is represented by an animal (dog) pressing a lever (stimulus) to obtain the preferred food (p231, paragraph 2). The initial test conditions were that an uncoated food was available on both levers to establish empirically that the animals responded equally to the lever schedules (p232, paragraph 2). The experiments begins with a lever that produces a coated food always being marked by a lighted rectangle (stimulus) above it while the lever that produces an uncoated food was marked by a lighted circle (stimulus) above it (p232, paragraph 6). The tests were repeated until a two-part behavioral criterion was established (p232, paragraph 6) and the results of the experiments were recorded and analyzed for the choices of preferred and non-preferred food (i.e. coated and uncoated) (p232, paragraph 8-10). The results show that dogs will respond differentially in a concurrent schedule lever pressing test to obtain the food containing the fat coating (flavor-enhancing) when the alternative is an uncoated portion of the same food and that highest coating-level produced the strongest preference. The rank preference for the different coating-levels was ultimately established (p233, paragraph 2).

### ***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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15. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 211-215) in view of Tapp et al. (Learn Mem. **2003**, 10, 64-73).

16. Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 211-215) discloses the method of determining the palatability of animal food compositions via an operant conditioning methodology (operant schedules) in which the pressing of a preferred lever releases the preferred food reward (p211; paragraph 3; p213, paragraphs 4-6) as well as that listed above. Rashotte et al. does not disclose all of the limitation of the discrimination learning procedure or discrimination reversal learning procedure.

17. Tapp et al. (Learn Mem. **2003**, 10, 64-73) discloses a discrimination learning procedure for the method of size and learning behavior in aging dogs. The method of discrimination learning involves using a food reward with a preferred stimulus and a non-preferred stimulus. The stimulus most frequently selected by the animal was deemed the preferred object. The dogs learn to displace a preferred stimulus when displacement of a non-preferred stimulus results in a food reward. The discrimination reversal learning procedure involved rewarding the dogs with food when the preferred stimulus was chosen while displacement of a non-preferred stimulus results in no food reward (p70, column 2). The responses to the stimuli and the choices of the dogs was recorded and analyzed for each trial (p71, paragraphs 2-5) and the dogs received 10 daily trials, 7 days per week.

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18. At the time of the invention it would have been obvious to one ordinarily skilled in the art to utilize the discrimination learning procedure limitations and discrimination reversal learning procedure of Tapp et al. (Learn Mem. **2003**, *10*, 64-73) for the method of determining the palatability of a food as disclosed by Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, *8*, 211-215). The concurrent schedules using preferred stimuli to test for palatability provides for good measurements of hedonic value that form the basis for a hedonic scale and the lever-press method compares foods that differ in significant, but not easily quantified, ways (i.e. dry food vs. semi-moist food). The concurrent schedules methodology minimizes consummatory behavior and makes estimated of preference on the basis of a common operant response [Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, *8*, 211-215, see p214, column 1)]. It is obvious to combine this method with the method of Tapp et al. since performance monitoring is a critical executive function and reversal learning tasks predominantly rely on executive functions. Discrimination reversals require subjects to inhibit prepotent responses to previously correct stimuli and to shift responses to a new stimulus-reward contingency within the same perceptual dimension [Tapp et al. (Learn Mem. **2003**, *10*, 64-73, see p64, paragraph 2)]. The discrimination reversals stimulus-reward trials allows for a true result in regards to the effects of palatability on the choice of the reward regardless of the stimulus (i.e preferred or non-preferred).



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19. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 231-237) in view of Tapp et al. (Learn Mem. **2003**, 10, 64-73).

20. Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 231-237) discloses the method of determining the palatability of food depending on a qualitative difference, such as flavors. The preference for a flavor is represented by an animal (dog) pressing a lever to obtain the preferred food as well as that listed above.

Rashotte et al. does not disclose a discrimination reversal learning procedure.

21. Tapp et al. (Learn Mem. **2003**, 10, 64-73) discloses a discrimination learning procedure for the method of size and learning behavior in aging dogs. The method of discrimination learning involves using a food reward with a preferred stimulus and a non-preferred stimulus as well as that listed above.

22. At the time of the invention it would have been obvious to one ordinarily skilled in the art to utilize the discrimination learning procedure limitations and discrimination reversal learning procedure of Tapp et al. (Learn Mem. **2003**, 10, 64-73) for the method of determining the palatability of a food as disclosed by Rashotte et al. (Neuroscience & Biobehavioral Reviews **1984**, 8, 231-237). It is obvious since performance monitoring is a critical executive function and reversal learning tasks predominantly rely on executive functions. Discrimination reversals require subjects to inhibit prepotent responses to previously correct stimuli and to shift responses to a new stimulus-reward contingency within the same perceptual dimension [Tapp et al. (Learn Mem. **2003**, 10, 64-73, see p64, paragraph 2)]. The discrimination reversals stimulus-reward trials allows for a true

result in regards to the effects of palatability on the choice of the reward regardless of the stimulus (i.e preferred or non-preferred).

### ***Conclusion***

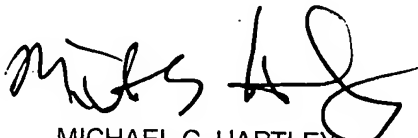
No claims are allowed at this time.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Perreira whose telephone number is 571-272-1354. The examiner can normally be reached on 9am-5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MP  
January 25, 2007

  
MICHAEL G. HARTLEY  
SUPERVISORY PATENT EXAMINER